

## AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

### Listing of Claims:

1-12. (*cancelled*).

13. (*currently amended*) A method for ~~the detection of determining the amount of thyroid stimulating hormone (TSH) receptor autoantibodies in a biological sample~~ human serum or plasma sample comprising:

- a) contacting said ~~biological sample~~ human serum or plasma sample with TSH receptor (TSHr) that is immobilized on a solid support in the presence of labeled ~~polyclonal human autoantibodies~~ antibodies against the TSH receptor ~~that have been affinity purified using TSHr~~ for a time sufficient for the autoantibodies in ~~the biological sample~~ said human or plasma sample to competitively bind to the TSH receptor;
- b) removing unbound labeled TSH receptor ~~autoantibodies~~; and
- c) ~~deteeting~~ determining the amount of TSH receptor autoantibodies in the human serum or plasma sample ~~TSH receptor autoantibodies in the biological sample~~ by measuring the amount of label bound to the TSH receptor,

wherein the labeled antibodies against the TSH receptor are affinity purified polyclonal human autoantibodies from a pool of sera from human Graves' disease patients, purified using a recombinant human TSH receptor.

14. (*previously presented*) The method of claim 13, wherein the affinity-purified polyclonal human autoantibodies against the TSH receptor are purified to biochemical homogeneity and have a specific activity of at least 1 IU/mg of protein.

15. (*previously presented*) The method of claim 13, wherein the affinity-purified polyclonal human autoantibodies against the TSH receptor are obtained by purification by affinity chromatography, from a pool of sera of Graves' disease patients, wherein said autoantibodies are bound to an affinity material having a functional human recombinant TSH receptor bound thereto, washed to remove unbound autoantibodies and then eluted from the affinity material.

16.     (*previously presented*) The method of claim 13, wherein said affinity-purified polyclonal human autoantibodies against the TSH receptor are labeled with a radioisotope, a chemiluminescent label or a fluorescent label.

17.     (*previously presented*) The method of claim 16, wherein said affinity-purified polyclonal human autoantibodies against the TSH receptor are directly or indirectly labeled.